



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 400  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,856	07/15/2003	Stefan Dessloch	SVL920020048US1	9144

24852 7590 01/18/2006

INTERNATIONAL BUSINESS MACHINES CORP  
IP LAW  
555 BAILEY AVENUE , J46/G4  
SAN JOSE, CA 95141

EXAMINER
----------

COLAN, GIOVANNA B

ART UNIT	PAPER NUMBER
----------	--------------

2162

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/620,856

Applicant(s)

DESSLOCH ET AL.

Examiner

Giovanna Colan

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/15/2003</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This action is issued in response to applicant filed application on 07/15/03.
2. Claims 1 – 42 are pending.

### ***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The “generic subclass” of claims 14 and 42 lacks of antecedent basis in the specification.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 2, 13 – 14, 27 – 28, 30, and 41 – 42 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 30 recite the limitation “types for the query element” in line 2. The specification does not provide a standard for ascertaining what the “type” defines. One of ordinary skill in the art would not appraised of the scope of the invention. Examiner is unclear whether the term “type” refers to the type of a query predicate and/or expression or to the data type of the element.

Claims 13, 27, and 41 recite the limitation "the populated model" in line 2. There is insufficient antecedent basis for this limitation in the claims.

Claims 14, 28, and 42 recite the limitation "substantially functionally equivalent" in line 4. The term "substantially" is a relative term, which renders the claim indefinite. In addition, examiner is unable to determine what the invention entails because the term is not fully and clearly described in the specification.

Best to examiner ascertain, the prior art is applied to the claims.

**Examiner asserts that all the claims should be checked for clarification.**

**Appropriate action is required.**

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 1 – 3, 5 – 10, 14 – 17, 19 – 24, 28 – 31, 33 – 38, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Witkowski et al. (hereinafter Witkowski) (US Patent No. 6,775,662 B1).

Regarding Claims 1 and 29, Witkowski discloses an article of manufacture comprising a computer program carrier readable by a computer and embodying one or more instructions executable by the computer for providing a structure for representing a query statement having an atomic query element (Fig. 5, item 521, Col. 11, lines 2 – 5, Witkowski) and a combined query element related by a combined operator (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski), the computer program comprising:

program instructions defining a superclass (Fig. 5, item 511, Witkowski), further comprising:

program instructions for defining a first subclass representing the atomic query element (Fig. 5, item 521, Col. 11, lines 2 – 5, Witkowski);

program instructions for defining a second subclass representing the combined query element (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski), wherein each of the left (Fig. 5, item 524, Col. 11, lines 1 – 5, Witkowski) and right subelements can be any subclass of the superclass (Fig. 5, item 514, Col. 11, lines 7 – 9, Witkowski); and

program instructions for defining a relationship indicator representing a relationship between the first subclass and the second subclass as defined by the combined operator (Fig. 5, item 511, AND, Col. 11, lines 7 – 9, Witkowski).

Regarding Claims 2 and 30, Witkowski discloses an article of manufacture, wherein at least one class of the superclass further comprises zero or more types for the query element (Col. 10, lines 64 – 66, Witkowski<sup>1</sup>) represented by that class and a subclass defined for each identified type (Fig. 5, item 513, and 514, Col. 11, lines 1 – 9, Witkowski<sup>2</sup>).

Regarding Claims 3 and 31, Witkowski discloses an article of manufacture, wherein at least one subclass further comprises a superclass (Fig. 5, item 513, Col. 11,

---

<sup>1</sup> Witkowski discloses a selection procedure to determine if the query contains conjunctive or disjunctive predicates (Fig. 3, Col. 8, lines 11 – 19, Witkowski). Conjunctive or disjunctive predicates/expressions would correspond to the type of query elements.

<sup>2</sup> In Fig. 5, item 513 would correspond to a class of the superclass, and item 514 would correspond to a subclass.

lines 7 – 9, Witkowski).

Regarding Claims 5 and 33, Witkowski discloses an article of manufacture, wherein the superclass represents a value expression (Fig. 5, item 511, Col. 11, lines 11 – 13, Witkowski<sup>3</sup>), the first subclass represents an atomic value expression (Fig. 5, item 521, Col. 10 and 11, lines 60 – 61 and 2 – 5; respectively, Witkowski) and the second subclass comprises a combined value expression (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski<sup>4</sup>).

Regarding Claims 6 and 34, Witkowski discloses an article of manufacture, wherein the superclass represents a search condition (Fig. 5, item 511, Col. 11, lines 11 – 13, Witkowski<sup>5</sup>), the first subclass represents an atomic search condition (Fig. 5, item 521, Col. 10 and 11, lines 60 – 61 and 2 – 5; respectively, Witkowski), and the second subclass represents a combined search condition (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski<sup>6</sup>).

Regarding Claims 7 and 35, Witkowski discloses an article of manufacture, wherein the superclass represents a group-by query element (Col. 6, lines 38 – 40,

---

<sup>3</sup> Witkowski discloses root node 511 that references the value expression of: “**where (a>3 AND (b<1 OR b=0) AND (gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0))**” (Col 10, lines 33 – 35, Witkowski).

<sup>4</sup> Witkowski (Fig. 5) discloses a parent node (item 513), which corresponds to the second subclass, and nchild nodes (items 524, 514, 515, 525, 526, 527, and 528), which correspond to a combined value expression (Col. 12, lines 21 – 23, “**gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

<sup>5</sup> Witkowski discloses root node 511 that references the search condition: “**where (a>3 AND (b<1 OR b=0) AND (gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0))**” (Col 10, lines 33 – 35, Witkowski).

Witkowski), the first subclass represents a group (Col. 11, lines 16 – 17, Witkowski), and the second subclass represents a grouping set (Col.11, lines 34 – 37, Witkowski).

Regarding Claims 8 and 36, Witkowski discloses an article of manufacture, wherein the second subclass further comprises a nested query language element (Fig. 5, item 514, 525, and 526, Col. 10, lines 33 – 35, element 514 comprising: “**(gc=0 AND d>0)**” is nested over element 513 comprising: “**(gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

Regarding Claims 9 and 37, Witkowski discloses an article of manufacture, wherein the second subclass represents an iterative query language element (Col. 11, lines 26 – 27, Witkowski<sup>7</sup>).

Regarding Claims 10 and 38, Witkowski discloses an article of manufacture, further comprising program instructions for receiving a query statement (Fig. 1, item 110, Col. 6, lines 29 – 32, Witkowski) having an atomic query element (Col. 10, line 34, **a>3**, Witkowski) and a combined query element associated by a combined operator (Col. 10, line 34, **gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**, Witkowski); and

---

<sup>6</sup> Witkowski (Fig. 5) discloses a parent node (item 513), which corresponds to the second subclass, and child nodes (items 524, 514, 515, 525, 526, 527, and 528), which correspond to a combined search condition (Col. 12, lines 21 – 23, “**gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

<sup>7</sup> Witkowski discloses a method for recursively creating parent nodes (item 513 in Fig. 5 is a parent node and also corresponds to the second subclass in the superclass). This method, utilizing recursion, involves repetition, recurrence, and/or iteration. In addition, Witkowski also discloses a method for processing conjunctions, which would later be used in the predicate query tree of Fig. 5, including an iterative loop (Col. 8, lines 37 – 38).



program instructions for populating the structure with the received query statement (Fig. 4, items 410, 420, and 430, and 440, Col. 10, lines 57 – 58, Witkowski).

Regarding Claims 14 and 42, Witkowski discloses an article of manufacture, further comprising:

program instructions for identifying a first query element type for a first query language dialect (Fig. 5, item 515, AND, Witkowski<sup>8</sup>);

program instructions for identifying at least a second query element type for at least a second query language dialect (Fig. 5, item 514, AND, Witkowski<sup>9</sup>), the second element type being substantially functionally equivalent to the first query element type (Fig. 5, items 514 and 515, Col. 11, lines 7 – 9, Witkowski<sup>10</sup>); and

program instructions for creating a generic subclass representative of both the identified first and at least second element type (Fig. 5, item 513, Witkowski<sup>11</sup>).

Regarding Claim 15, Witkowski discloses a method for hierarchically representing a query statement having an atomic query element (Fig. 5, item 521, Col. 11, lines 2 – 5, Witkowski) and a combined query element related by a combined operator (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski) comprising the steps of:

---

<sup>8</sup> The type AND would correspond to conjunction (conjunctive). Witkowski also discloses an identification of types procedure (selection process see Fig. 3, Col. 8, lines 11 – 19, Witkowski). The query dialect would correspond to the syntax of the query expression: " c=0 AND d<0 ".

<sup>9</sup> The type AND would correspond to conjunction (conjunctive). Witkowski also discloses an identification of types procedure (selection process see Fig. 3, Col. 8, lines 11 – 19, Witkowski). The query dialect would correspond to the syntax of the query expression: " gc=0 AND d>0 ".

<sup>10</sup> Items 514 and 515 (Fig. 5) are functionally equivalent because both of them are conjunctive operators (AND), forming conjunctive expressions, and both of them represent parent nodes.

defining a superclass representing the query element (Fig. 5, item 511, Witkowski);

defining a first subclass of the superclass representing the atomic query element (Fig. 5, item 521, Col. 11, lines 2 – 5, Witkowski);

defining a second subclass of the superclass representing the combined query element (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski), wherein each of the left (Fig. 5, item 524, lines 1 – 5, Witkowski) and right subelements comprises any class of the superclass (Fig. 5, item 514, Col. 11, lines 7 – 9, Witkowski); and

indicating a relationship between the first subclass and the second subclass defined by the combined operator (Fig. 5, item 511, AND, Col. 11, lines 7 – 9, Witkowski).

Regarding Claim 16, Witkowski discloses a method, further comprising the step of: for at least one class of the superclass, identifying zero or more types for the query element (Col. 10, lines 64 – 66, Witkowski<sup>12</sup>) represented by that class and defining a subclass for each identified type (Fig. 5, item 513, and 514, Col. 11, lines 1 – 9, Witkowski<sup>13</sup>).

---

<sup>11</sup> Item 513 (Fig. 5) would correspond to the generic subclass that represents items 514 and 515 elements.

<sup>12</sup> Witkowski discloses a selection procedure to determine if the query contains conjunctive or disjunctive predicates (Fig. 3, Col. 8, lines 11 – 19, Witkowski). Conjunctive or disjunctive predicates/expressions would correspond the type of query elements.

<sup>13</sup> In Fig. 5, item 513 would correspond to a class of the superclass, and item 514 would correspond to a subclass.

Regarding Claim 17, Witkowski discloses a method, wherein at least one subclass further comprises a superclass (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski).

Regarding Claim 19, Witkowski discloses a method, wherein the superclass represents a value expression (Fig. 5, item 511, Col. 11, lines 11 – 13, Witkowski<sup>14</sup>), the first class represents an atomic value expression (Fig. 5, item 521, Col. 10 and 11, lines 60 – 61 and 2 – 5; respectively, Witkowski) and the second class comprises a combined value expression (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski<sup>15</sup>).

Regarding Claim 20, Witkowski discloses a method, wherein the superclass represents a search condition (Fig. 5, item 511, Col. 11, lines 11 – 13, Witkowski<sup>16</sup>), the first class represents an atomic search condition (Fig. 5, item 521, Col. 10 and 11, lines 60 – 61 and 2 – 5; respectively, Witkowski), and the second class represents a combined search condition (Fig. 5, item 513, Col. 11, lines 7 – 9, Witkowski<sup>17</sup>).

Regarding Claim 21, Witkowski discloses a method, wherein the superclass represents a group-by query element (Col. 6, lines 38 – 40, Witkowski), the first class

---

<sup>14</sup> Witkowski discloses root node 511 that references the value expression of: “**where (a>3 AND (b<1 OR b=0) AND (gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0))**” (Col 10, lines 33 – 35, Witkowski).

<sup>15</sup> Witkowski (Fig. 5) discloses a parent node (item 513), which corresponds to the second subclass, and nchild nodes (items 524, 514, 515, 525, 526, 527, and 528), which correspond to a combined value expression (Col. 12, lines 21 – 23, “**gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

<sup>16</sup> Witkowski discloses root node 511 that references the search condition: “**where (a>3 AND (b<1 OR b=0) AND (gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0))**” (Col 10, lines 33 – 35, Witkowski).

represents a group (Col. 11, lines 16 – 17, Witkowski), and the second class represents a grouping set (Col.11, lines 34 – 37, Witkowski).

Regarding Claim 22, Witkowski discloses a method, wherein the second class further comprises a nested query language element (Fig. 5, item 514, 525, and 526, Col. 10, lines 33 – 35, element 514 comprising: “**(gc=0 AND d>0)**” is nested over element 513 comprising: “**(gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

Regarding Claim 23, Witkowski discloses a method, wherein the second class represents an iterative query language element (Col. 11, lines 26 – 27, Witkowski<sup>18</sup>).

Regarding Claim 24, Witkowski discloses a method, further comprising the steps of:

receiving a query statement (Fig. 1, item 110, Col. 6, lines 29 – 32, Witkowski) having an atomic query element (Col. 10, line 34, **a>3**, Witkowski) and a combined query element associated by a combined operator (Col. 10, line 34, **gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**, Witkowski); and

---

<sup>17</sup> Witkowski (Fig. 5) discloses a parent node (item 513), which corresponds to the second subclass, and child nodes (items 524, 514, 515, 525, 526, 527, and 528), which correspond to a combined search condition (Col. 12, lines 21 – 23, “**gc=1 OR (gc=0 AND d>0) OR (c=0 and d<0)**”, Witkowski).

<sup>18</sup> Witkowski discloses a method for recursively creating parent nodes (item 513 in Fig. 5 is a parent node and also corresponds to the second subclass in the superclass). This method, utilizing recursion, involves repetition, recurrence, and or iteration. In addition, Witkowski also discloses a method for processing conjunctions, which would later be used in the predicate query tree of Fig. 5, including an iterative loop (Col. 8, lines 37 – 38).

populating the structure with the received query statement (Fig. 4, items 410, 420, and 430, and 440, Col. 10, lines 57 – 58, Witkowski).

Regarding Claim 28, Witkowski discloses a method, further comprising the steps of:

i) identifying a first query element type for a first query language dialect (Fig. 5, item 515, AND, Witkowski<sup>19</sup>);

ii) identifying at least a second query element type for at least a second query language dialect (Fig. 5, item 514, AND, Witkowski<sup>20</sup>), the second element type being substantially functionally equivalent to the first element type (Fig. 5, items 514 and 515, Col. 11, lines 7 – 9, Witkowski<sup>21</sup>); and

iii) creating a subclass representative of both the identified first and at least second element types (Fig. 5, item 513, Witkowski<sup>22</sup>).

---

<sup>19</sup> The type AND would correspond to conjunction (conjunctive). Witkowski also discloses an identification of types procedure (selection process see Fig. 3, Col. 8, lines 11 – 19, Witkowski). The query dialect would correspond to the syntax of the query expression: " c=0 AND d<0 ".

<sup>20</sup> The type AND would correspond to conjunction (conjunctive). Witkowski also discloses an identification of types procedure (selection process see Fig. 3, Col. 8, lines 11 – 19, Witkowski). The query dialect would correspond to the syntax of the query expression: " gc=0 AND d>0 ".

<sup>21</sup> Items 514 and 515 (Fig. 5) are functionally equivalent because both of them are conjunctive operators (AND), forming conjunctive expressions, and both of them represent parent nodes.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 4, 11 – 13, 18, 25 – 27, 32, and 39 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witkowski et al. (hereinafter Witkowski) (US Patent No. 6,775,662 B1) in view of Li et al. (hereinafter Li)(US Patent No. 5,428,737).

Regarding Claim 4, 18, and 32, Witkowski discloses all the limitations as disclosed above including an article of manufacture, wherein a superclass represents a

---

<sup>22</sup> Item 513 (Fig. 5) would correspond to the generic subclass that represents items 514 and 515 elements.

table reference (Col. 11, lines 38 – 46, Witkowski) and a first subclass represents an unjoined expression (Fig. 5, item 521, Col. 10 and 11, lines 60 – 62 and 2 – 4; respectively, Witkowski) and a second subclass represents a joined query expression (Fig. 5, item 513, Col. 10, lines 34 – 35, joined by operator “OR”, Witkowski). However, Witkowski is silent with respect to subclasses that represent tables (Claim 4, 18, and 32). On the other hand, Li discloses a system and method including subclasses (Col. 6, lines 1 – 15, Li), and query statements that represent tables (Fig. 3, Col. 5, lines 41 – 46, Li). It would have been obvious to one of ordinary skills in the art at the time the invention was made to incorporate the teachings of Li, regarding queries, and subclasses that represent tables, to the system and method of Witkowski. Skilled artisan would have been motivated to do so, in order to provide a better and more organized view of the records and columns containing the data.

11. Regarding Claims 11 – 12, 25 – 26, and 39 - 40, Witkowski teaches all the limitations as disclosed above including an interface (Fig. 6, item 618, Col. 13, lines 64 – 67, Witkowski). However, Witkowski is silent with respect to a user - interface (Claim 11, 25, and 39) or an application interface (Claim 12, 26, and 40). On the other hand, Li discloses a method and system including receiving a query statement from a user-interface (Col. 4 and 5, lines 33 – 42 and 20 – 25, Li) and application interface (Col. 4 and 5, lines 33 – 42 and 20 – 25, Li). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Li, including

the user and application interface, to the system and method of Witkowski. Skilled artisan would have been motivated to do so, in order to allow users to input query statements, and to provide a more organized, reliable, and robust system for managing query statements.

12. Regarding Claim 13, 27, and 41, Witkowski discloses all the limitations as disclosed above including query elements of a class or subclass instance of a populated model (Fig. 5, Witkowski), and mean for building a query statement from query elements using the relationships defined by the hierarchical class structure of the model (Col. 12, lines 8 – 9, Witkowski). However, Witkowski is silent with respect to means responsive to selection and for retrieving query elements. On the other hand, Li discloses a system and method for converting queries including responsive means to selection, and for retrieving only query elements populating the selected class or subclass instance (Fig. 2 and 8, items 12 and 8, Col. 17, lines 52 – 60, Li). It would have been obvious to one of ordinary skills in the art at the time the invention was made to apply the teachings of Li, with respect to means responsive to selection and retrieving selections. Skilled artisan would have been motivated to do so, to provide an accessible system for users who want to select and work with specific database structures.



***Prior Art Made of Record***

1. Witkowski et al. (US Patent No. 6,775,662 B1) discloses group pruning from cube, rollup, and grouping sets.
2. Li et al. (US Patent No. 5,428,737) discloses a comprehensive bilateral translation between sql and graphically depicted queries.
3. Banning et al. (US Patent No. 5,421,008) discloses a system for interactive graphical construction of a data base query and storing of the query object links as an object.

***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna Colan whose telephone number is (571) 272-2752. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Giovanna Colan  
Examiner  
Art Unit 2162  
January 5, 2006



SAFET METJAHIC  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100